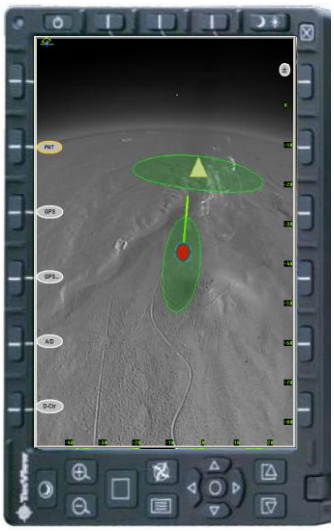
USTRANSCOM Science and Technology

Large Aircraft Infrared Countermeasures (LAIRCM) Enhanced Situational Awareness (LESA)

Project Summary: LESA uses the existing LAIRCM NexGen Missile Warning System (MWS) sensors, turret Fine Track Sensors (FTS) and dynamic re-tasking capability display to provide high-resolution, real-time infrared (IR) imagery to aircrew, similar to a Forward Looking Infrared (FLIR) system. LESA operates in three modes; (1) Point as directed (azimuth & elevation relative to the host aircraft), (2) Point to a GPS coordinate and (3) Point to an intended airdrop Point-of-Impact (PI), track a bundle as it leaves the aircraft and report the Global Positioning System (GPS) coordinate where it landed. In all modes, LESA can display in wide field-of-view (FOV) using the MWS sensors, or narrow FOV using the FTS



Current Status: Approved FY15 USTRANSCOM funded effort.

Return on Investment: LESA provides situational awareness currently unavailable on mobility aircraft -- improved pre-airdrop assessment of risks, more accurate airdrop results, and post-airdrop assessment of outcome & bundle location.

Duration of project: FY15-FY16

Participants: Air Mobility Command (AMC), Air Force Research Lab (AFRL)

Project advocacy (funding or otherwise): AMC